



LOGGERHEADLINES

Sea Turtle News from South Carolina

August - November, 2005

Greetings!

The 2005 sea turtle season is winding down, but much has been going on during the past four months, as you will see in this issue of *Loggerheadlines*.

Strandings

August strandings were similar to last year. There were 13 strandings compared to 12 last year and 25 in 2003. There were nine loggerheads, one green turtle, two Kemp's ridleys and one unidentified.

September strandings were also similar to the previous six years. There were four loggerheads, one green turtle and two Kemp's ridleys.

There were no strandings in October, which has occurred only two other times. However, strandings picked up again in November with eight recorded, including five loggerheads, two green turtles and one leatherback. Three of these were debilitated turtles, which showed the same pattern by coming ashore along the northern coast. The annual total of 109 is the lowest since 1994.

Necropsy Summary

Four necropsies were performed with the help of Dr. David Owens' "Marine Tetrapods" graduate class at the College of Charleston. All four were loggerheads; three females and one male.

Three died of chronic conditions and one died from an acute cause. One had multiple shark bites, which occurred after death. Another was entangled in ocean debris, including fishing line, a tee shirt and a Mutant Ninja Turtle doll.

Rehabilitation at the SC Aquarium

The South Carolina Aquarium (SCA) admitted two loggerhead turtles into the Turtle Hospital in August. One, found in an impoundment on Dewees Island, was very thin and anemic, but uninjured. After 10 weeks of treatment, "Dewees" was released into the ocean.

"St. Simon", from Georgia, was severely debilitated and suffering from anemia, emaciation and dehydration. It will over-winter at the aquarium.

Three loggerhead turtles were released in August. "Jetty", a juvenile caught in the SCDNR In-water Study, was outfitted with a satellite transmitter. This was the first aquarium turtle to be satellite tagged. It traveled north to the North Carolina coast, but no transmissions have been received since early November. Our cover photo is of "Jetty's" release.

"Gardner" was released on Seabrook Island with "Jetty". "Surfside" made a quick recovery and was released on the Isle of Palms. Twenty turtles have been successfully rehabilitated and released thus far by the SCA.

Bruce Hecker, Director of Husbandry and Facilities for the SCA, and one of the first employees hired, has retired. Jason Crichton will be filling his post.

The SCA also has a new Chief Executive Officer. Kevin Mills came from the St. Louis Zoo where he was Vice President for Marketing and External Affairs.

We wish Bruce well and look forward to working with Jason and Kevin. – **Kelly Thorvalson, Aquarist**

Regional Update

South Carolina

As seen in the following table, nesting totals on the project beaches were slightly below the 2003 nesting season, but a huge recovery from last year. That would be expected since the turtles that would have come in 2004 and did not, probably came this year.

The project beaches continue to comprise approximately 70% of the nesting for the state. Based on this, the statewide total would be 3,477. The statewide estimate based on the aerial surveys tended to over-estimate on some beaches and was about 15% higher than what is reported for the project beach estimate. The statewide aerial estimate, based on the mean of two observers (**Charlotte Hope** and **DuBose Griffin**), was 4,078.

Nesting Update

Thru 10/31	2003	2004	2005
Myrtle Beach SP	5	2	3
Huntington Beach SP	19	10	5
S.C.U.T.E.	97	23	62
South Island*	99	16	122
Cape Island	837	249	826
Lighthouse Island	314	95	232
Deweese Island	14	3	9
Sullivans/Isle of Palms	35	10	56
Folly Beach	50	22	37
Kiawah Island	228	64	154
Seabrook Island	34	4	51
Botany Bay Isl & Plan	271	76	219
Edingsville Beach	62	16	73
Edisto Beach S. P.	87	20	94
Edisto Beach	63	11	88
Harbor Island	48	22	39
Hunting Island	67	19	90
Fripp Island	54	9	40
Pritchards Island	124	29	71
Hilton Head Island	173	69	163
TOTAL	2681	769	2,434

NOTE: South Island 2005
Estimated

Georgia

Mark Dodd with Georgia DNR reports that loggerhead nesting was slightly above the 17-year average of approximately 1,000 nests; however, the long-term trend remains a significant decline over a 33-year period. Total strandings to date are 204. There was a lower incidence of debilitated turtle syndrome and fewer carcasses with prop wounds, but there is no trend in stranding numbers.

North Carolina

Matthew Godfrey, State Coordinator for the North Carolina Wildlife Commission, reports that the 2005 sea turtle nesting season ended with 625 nests laid. This is below the annual average of 725 nests based on the previous 10 years. The majority of nests were loggerheads and there were nine leatherback nests on Bogue Banks and Cape Lookout National Seashore. Hurricane Ophelia destroyed the majority of nests still incubating at the end of the season.

There have been 348 observed stranded turtles to date in 2005. This is about 100 fewer than the average for the last several years. Warmer water temperatures and reduced fishing effort due to increased fuel costs may be contributing to this trend.

Florida

Allen Foley, State Stranding Coordinator, reports there has been an unprecedented number of sea turtle strandings in southwest Florida this year because of a persistent red tide event that has been present in that area since the beginning of 2005. As of November 26, there have been 440 sea turtle strandings documented in just seven southwest Florida counties (about 150 miles of coastline). Most (321 turtles) have been documented since June 11. Loggerheads and Kemp's ridleys have accounted for a majority of the strandings (293 and 93 turtles, respectively).

Tissue samples taken from dead turtles have been found to have high concentrations of brevetoxin (the toxic component of red tides in Florida) and the results of detailed necropsies conducted on fresh dead turtles have indicated brevetoxicosis as the cause of death.

A more recent red tide event in the Florida Panhandle (northwest Florida) has resulted in above-average numbers of sea turtle strandings in that area since late September. Sea turtle strandings around the rest of Florida have been average or below average in 2005.

Blair Witherington, with the Florida Fish and Wildlife Conservation Commission, reports the nesting season weather in Florida was mild, with no reported coldwater upwelling and no direct hits from tropical systems at the major beaches. Major Atlantic coast beaches did not receive significant erosion until Ophelia in mid-September, which was post-nesting. Most nesting in 2005 took place in artificial dunes that were constructed in 2004, and there were many problems caused by this new substrate.

Loggerheads had the second lowest nest count in 17 years, but an increase from the previous dismal season. However, it was a record year for green turtle nests with the highest nest count in 17 years. Both species had extremely low nesting success (nest/false crawl ratio) in some artificial dune areas. Leatherbacks had the third highest (but close to second) nest count for the same time period. Other post-2004-hurricane effects included lights, previously hidden by dune vegetation, were now visible.

Federal Activities

On 7 November, the Kemp's Ridley Working Group met in Brownsville, Texas. According to preliminary reports, 10,099 Kemp's ridley nests were documented in Mexico this season. An additional 54 nests were documented in the United States (51 in Texas, two in Florida and one in Georgia).

Following the Working Group meeting, the Kemp's Ridley Sea Turtle Recovery Team met

from 8 to 10 November to continue work on the plan and discuss the next stakeholder meeting, which will be held in the U.S.

– **Sandy MacPherson, National Sea Turtle Coordinator, U.S. Fish and Wildlife Service**

Beach Vitex Update

Five Task Force members surveyed North Island (nine miles) by foot on 16 August and found no beach vitex. Two plants were found last year.

Pawleys Island's *Coastal Observer* newspaper featured a front-page article "Volunteers Root Up Vitex" in conjunction with the effort on Hobcaw Beach where 104 seedlings/plants were removed.

The Town of Edisto Beach passed an ordinance prohibiting the planting of beach vitex, stating that it is "unlawful to introduce, plant or maintain beach vitex within the Town of Edisto Beach".

Lowes Stores, which sold *Vitex rotundifolia* in the past, will not carry the invasive plant in the future. The SC Beach Vitex Task Force website address was emailed to vendors by the Lowes' regional plant buyer asking them not to ship the plants to their stores.

There is much more being done about beach vitex, especially in North Carolina, than can be included here. So for complete information please visit <http://www.beachvitex.org/> – **Betsy Brabson**

What's a group of hatchlings called?

Art Zachrison from Kiawah Island asked this question. When he researched it on the web, the answer came back, "bale". How boring. We asked our network members to submit suggestions. Twenty-eight were received. A runoff was held for the top five. Voting was brisk and we appreciate everyone taking the time to participate. The overwhelming winner was "Scramble" with 42.4% of the votes. The final tally was:

Scramble - 28, Batch - 13, Troop - 12, Legion - 9, Horde - 4

Congratulations to Sally Krebs of Hilton Head Island for submitting the winning name. Her prize will be a personal tour of the ACE Basin with Tom Murphy.

Notes from the Field

Cape Island

The leatherback nest that was laid on 14 June hatched on 14 August. Of the 87 eggs, 47 produced hatchlings like the one shown in the photo below. – **Sarah Dawsey**



Photo by Sarah Dawsey, USFWS

Dewees, Fripp and Lighthouse Islands

Three unusual hatchlings were discovered during nest inventories. The ones from Dewees and Fripp islands had two heads, which we have seen before. But the one from Lighthouse Island in Cape Romain NWR were Siamese twins.



Photo by Lee Miller

Photo by Nancy Smith

Research

Satellite Tracking - Update

Lofton's Lass' battery finally gave out and she stopped transmitting in early November. Her transmitter had lasted over 850 days! She had rounded Cape Hatteras and was on her way back to her winter foraging area for the third time. She did not return to South Carolina waters during the two summers after being instrumented.

Thanks!

As all of us bid you farewell for this season, you should know how much we appreciate all your efforts on behalf of the sea turtle resource here in South Carolina.

Please note our new email address for the sea turtle desk: coastbio@dnr.sc.gov

Please note our new web site address:
www.dnr.sc.gov/seaturtle/

Cover photo by **Barbara Bergwerf**

Sally Murphy, *State Coordinator*
Charlotte Hope, *Biologist*
DuBose Griffin, *GIS Analyst, Sea Turtle Desk*
Joan Seithel, *Technical Assistant*

If you have questions or comments, please contact:
Endangered Species Office
S. C. Department of Natural Resources
P. O. Box 12559
Charleston, SC 29422-2559
Phone: 843-953-9015
Fax: 843-953-9353
E-mail: coastbio@dnr.sc.gov
URL: <http://www.dnr.sc.gov/seaturtle/>



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